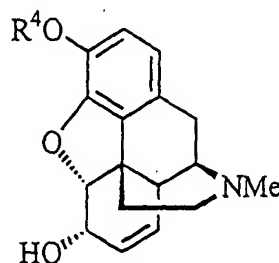


2. A process according to claim 1 wherein said 4,5-Epoxymorphinan-6-ol is selected from the compounds of the formula [3a]



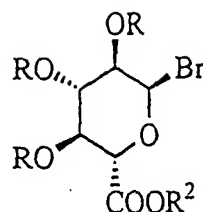
[3a]

wherein

R<sup>4</sup> is as previously defined.

3. A process according to claim 1 wherein said 4,5-Epoxymorphinan-6-ol is selected from 3-O-Acylmorphine, 3-O-Acynormorphine, 3-O-Acynalbuphine, 3-O-Acynalorphine, 3-O-Acyldihydromorphine, 3-O-Benzylmorphine, 3-O-Benzylhydromorphine, N,O<sup>3</sup>-Dibenzylnormorphine, Codeine, Ethylmorphine, Dihydrocodeine, Pholcodine, 3-O-Alkoxycarbonylmorphine, 3-O-Benzylloxycarbonylmorphine, N,O<sup>3</sup>-Bis(benzylloxycarbonyl)normorphine.

4. A process according to claim 1 wherein said Bromoglucuronide is selected from compounds of formula [2a]



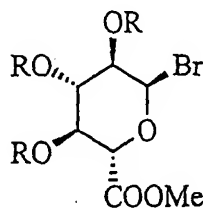
[2a]

wherein

R is acyl, alkoxycarbonyl, aralkoxycarbonyl, haloalkoxycarbonyl, vinyloxy carbonyl or allyloxy carbonyl;

R<sup>2</sup> is as previously defined.

5. A process according to claim 1 wherein said Bromoglucuronide is selected from compounds of formula [2b]

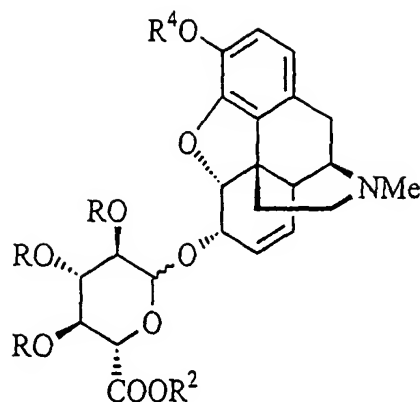


[2b]

wherein

R is as previously defined.

6. A process as recited in claim 1 wherein said protected 4,5-Epoxymorphinan-6-oxyglucuronide is an N-Methyl-4,5-epoxymorphinan-6-oxyglucuronide of formula [1a] or derivative.



[1a]

wherein:

position 7 and 8 can be olefin as shown or dihydro adduct;

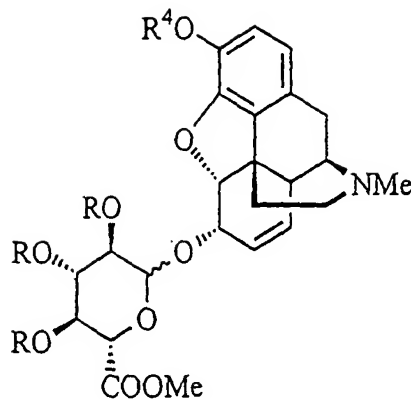
R is acyl, alkoxycarbonyl, aralkoxycarbonyl, haloalkoxycarbonyl, vinyloxycarbonyl, allyloxycarbonyl, benzyloxycarbonyl, nitrobenzyloxycarbonyl, methoxybenzyloxycarbonyl or aroxycarbonyl

R<sup>2</sup> is alkyl, haloalkyl or aralkyl;

R<sup>4</sup> is alkyl, haloalkyl, arylmethyl, 2-(4-morpholinyl)ethyl, acyl, alkoxycarbonyl, aralkoxycarbonyl, haloalkoxycarbonyl, vinyloxycarbonyl or allyloxycarbonyl.

7. A process as recited in claim 1 wherein R<sup>2</sup> and R<sup>3</sup> are methyl.

8. A process according to claim 1 wherein said protected 4,5-epoxymorphinan-6-oxyglucuronide is of formula [1b].

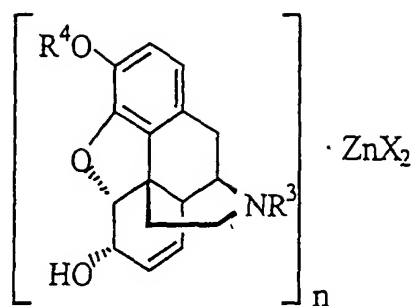


[1b]

wherein

R and R<sup>4</sup> are as previously defined.

9. A process as recited in claim 1 wherein the said reaction occurs in the presence of molecular sieves.
10. A process as recited in claim 1 wherein the reaction occurs in a non-protic reaction inert solvent.
11. A process as recited in claim 10 wherein the inert solvent is selected from Chloroform, Dichloromethane or Dichloroethane.
12. A process as recited in claim 1 wherein the Zinc containing compound is Zinc Bromide.
13. Use of a Zinc complex of a general formula [3b]



[3b]

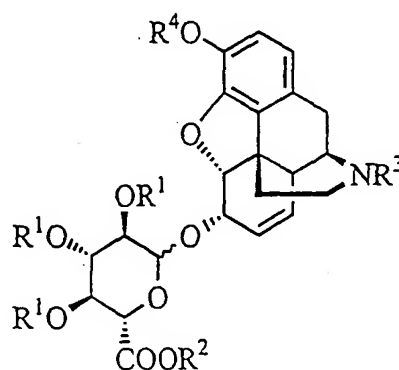
wherein

$R^3$  and  $R^4$  are as previously defined;

X is a halogen or a cyano-group;

n  $0.5 \div 2$

for preparation of a protected 4,5-Epoxymorphinan-6-oxyglucuronide of a general formula [1] or a salt or complex thereof

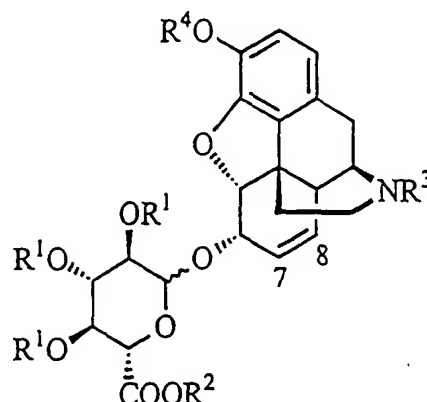


[1]

wherein

$R^1, R^2, R^3$  and  $R^4$  are as previously defined.

14. A process for the synthesis of a protected 4,5-Epoxymorphinan-6-oxyglucuronide of formula [1] or a salt or complex thereof



[1]

wherein:

position 7 and 8 are olefin as shown or dihydro adduct;

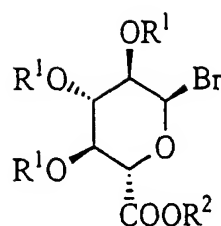
R<sup>1</sup> is alkyl, haloalkyl, arylmethyl, acyl, alkoxycarbonyl, aralkoxycarbonyl, haloalkoxycarbonyl, vinyloxycarbonyl or allyloxycarbonyl;

R<sup>2</sup> is alkyl, haloalkyl or aralkyl;

R<sup>3</sup> is alkyl, arylmethyl, allyl, cyclopropylmethyl, cyclobutylmethyl, hydrogen, acyl, alkoxycarbonyl, aralkoxycarbonyl, haloalkoxycarbonyl, vinyloxycarbonyl or allyloxycarbonyl;

R<sup>4</sup> is alkyl, haloalkyl, arylmethyl, 2-(4-morpholinyl)ethyl, acyl, alkoxycarbonyl, aralkoxycarbonyl, haloalkoxycarbonyl, vinyloxycarbonyl or allyloxycarbonyl

comprising reaction of Bromoglucuronide of the formula [2]



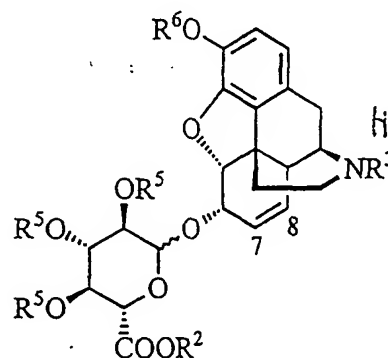
[2]

wherein

R¹ and R² are as previously defined;

with complex of the formula [3b] under conditions capable of forming said protected 4,5-Epoxymorphinan-6-oxyglucuronide [1] or a salt or complex thereof.

15. A compound having the following formula:



[1c]

wherein:

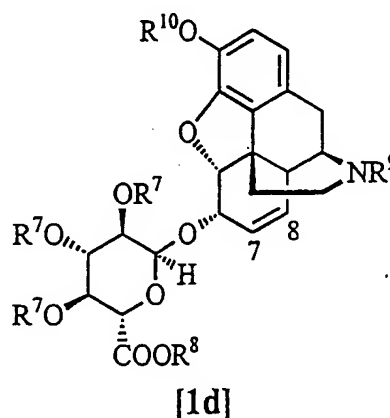
position 7 and 8 is olefin as shown or dihydro adduct;

R² and R³ are as previously defined;

R⁶ is selected from alkoxycarbonyl, aralkoxycarbonyl, haloalkoxycarbonyl, vinyloxycarbonyl, allyloxycarbonyl and R⁵ is selected from alkyl, haloalkyl, arylmethyl, acyl, alkoxycarbonyl, aralkoxycarbonyl, haloalkoxycarbonyl, vinyloxycarbonyl,

allyloxycarbonyl or  $R^6$  is selected from alkyl, haloalkyl, arylmethyl, 2-(4-morpholinyl)ethyl, acyl, alkoxycarbonyl, aralkoxycarbonyl, haloalkoxycarbonyl, vinyloxycarbonyl, allyloxycarbonyl when one of  $R^5$  is selected from alkoxycarbonyl, aralkoxycarbonyl, haloalkoxycarbonyl, vinyloxycarbonyl, allyloxycarbonyl.

16. A compound having the following formula:



wherein:

position 7 and 8 is olefin as shown or dihydro adduct;

$R^7$  is hydrogen, alkyl, haloalkyl, arylmethyl, acyl, alkoxycarbonyl, aralkoxycarbonyl, haloalkoxycarbonyl, vinyloxycarbonyl or allyloxycarbonyl;

$R^8$  is hydrogen, alkyl, haloalkyl or aralkyl;

$R^9$  is hydrogen, alkyl, arylmethyl, allyl, cyclopropylmethyl, cyclobutylmethyl, hydrogen, acyl, alkoxycarbonyl, aralkoxycarbonyl, haloalkoxycarbonyl, vinyloxycarbonyl or allyloxycarbonyl;

$R^{10}$  is hydrogen, alkyl, haloalkyl, arylmethyl, 2-(4-morpholinyl)ethyl, acyl, alkoxycarbonyl, aralkoxycarbonyl, haloalkoxycarbonyl, vinyloxycarbonyl or allyloxycarbonyl.

17. A compound of formula [1c] according to claim 15 wherein  $R^2$  and  $R^3$  are both Me.



18. A protected 4,5-Epoxymorphinan-6-oxyglucuronide synthesised according to any of claims 1 to 12 or 14.
19. A process for synthesising M6G comprising:  
synthesising a protected 4,5-Epoxymorphinan-6-oxyglucuronide according to any of claims 1 to 12 or 14; and  
hydrolysing the protected 4,5-Epoxymorphinan-6-oxyglucuronide to form M6G.
20. M6G synthesised according to claim 19.
21. M6G synthesised using a zinc complex according to claim 13.